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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/567,698	02/03/2006	Saied Abedi	FUJL 22.278(100794-01010)	3895
26304 7590 03/03/2009 KATTEN MUCHIN ROSENMAN LLP 575 MADISON AVENUE NEW YORK, NY 10022-2585				
EXAMINER VU, MICHAEL T				
ART UNIT 2617		PAPER NUMBER		
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/567,698

**Applicant(s)**

ABEDI, SAIED

**Examiner**

MICHAEL T. VU

**Art Unit**

2617

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-31 and 33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-31 and 33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 February 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/003)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Information Disclosure Statement***

2. The information disclosure statement (IDS) submitted on 4/27/2006, 2/03/2006 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-31, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Attar (US 6,757,520) in view of Subramanian (US 2002/0147022).

**Regarding claims 1 and 26**, Attar teaches a method of selecting an active base station for use during soft handover (Figure #1, Access Terminal #104, Selecting Access Point/Base Stations #100, #102), the active base station being for receiving

data from a source user equipment for onward transmission to a destination user equipment (Col. 7, lines 21-65), the method comprising: determining a measure of a quality of service from the base station to the destination user equipment (Col. 3, line 60 to Col. 4, line 42), and (Col. 7, lines 21-65); and

**But Attar does not clearly teach** selecting the base station as an active base station based on the measure of the quality of service.

However, Subramanian teaches selecting the base station as an active base station based on the measure of the quality of service [0028-0039], and claims 15, 20.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Attar, such that Subramanian's, in order to provide the best performance for selecting the base station such as quality of service and/or during handoff, e.g. for maximizing the effective data rate for avoiding overlapping etc.

**Regarding claims 2**, Attar and Subramanian teach the method according to claim 1, further comprising determining a credit value based on the measure of the quality of service [0030], and transmitting the credit value from the base station to the source user equipment [0028-0033] of Subramanian.

**Regarding claim 3**, the combination of Attar and Subramanian teach the method according to claim 2, wherein the source user equipment receives the credit value from the base station [0028-0033] and selects a base station as an active base station based on the credit value [0028-0033] of Subramanian.

**Regarding claim 4**, the combination of Attar and Subramanian teach the method according to claim 3, wherein a credit value is determined for each of a plurality of source user equipments [0028-0033] of Subramanian.

**Regarding claim 5**, Attar and Subramanian teach the method according to claim 1, wherein a plurality of different measures of the quality of service from the base station to a destination user equipment are determined [0028-0039] of Subramanian.

**Regarding claim 6**, Attar and Subramanian teach the method according to claim 1, wherein **at least one** of the following measures of quality of service is determined: (a) throughput ratio ([0002, 001-0022] of Subramanian) (b) ratio of satisfied packets (c) base station buffer occupancy.

**Regarding claim 7**, Attar and Subramanian teach the method according to claim 1, wherein a credit value is determined for each of a plurality of source user equipments by comparing measures of a quality of service from the base station to a plurality of destination user equipments [0028-0033] of Subramanian.

**Regarding claim 8**, the combination of Attar and Subramanian teach the method according to claim 7, wherein the credit value is based on **at least one** of the following relative measures: (a) distance from average throughput ([0013-0017], [0028-0033] of Subramanian) (b) distance from minimum throughput ratio (c) distance from minimum quality of service (d) distance from minimum buffer length.

**Regarding claim 9**, the combination of Attar and Subramanian teach the method according to claim 7, wherein the credit value is based on a plurality of relative

measures [0028-0033], and is a single value obtained by combining the relative measures [0028-0033] of Subramanian.

**Regarding claim 10**, Attar and Subramanian teach the method according to claim 1 wherein a source user equipment receives credit values from the base station [0028-0033], and selects a base station as an active base station based on a history of the credit values [0028-0039] of Subramanian.

**Regarding claim 11**, the combination of Attar and Subramanian teach the method according to claim 10, wherein a source user equipment with an improving history of credit values from a base station selects that base station as an active base station [0028-0033] of Subramanian.

**Regarding claim 12**, the combination of Attar and Subramanian teach the method according to claim 11, wherein a source user equipment with a worsening history of credit values from a base station deselects that base station as an active base station [0028-0039] of Subramanian.

**Regarding claim 13**, Attar and Subramanian teach the method according to claim 1, wherein a base station is selected as an active base station based additionally on a measure of radio channel conditions from a source user equipment to the base station [0028-0039] of Subramanian.

**Regarding claim 14**, the combination of Attar and Subramanian teach the method according to claim 13, wherein a base station is selected as an active base station based on a history of radio channel conditions [0028-0039] of Subramanian.

**Regarding claim 15**, Attar and Subramanian teach the method according to claim 1, wherein the selecting is carried out by a user equipment and the method further comprising transmitting an indication of a selected base station from the user equipment to the base station [0028-0033] of Subramanian.

**Regarding claim 16**, Attar and Subramanian teach the method according to claim 1, further comprising scheduling uplink transmissions in dependence on the measure of a quality of service [0030-0033] of Subramanian.

**Regarding claim 17**, the combination of Attar and Subramanian teach the method according to claim 16, wherein a source user equipment receives a credit value based on the measure of a quality of service and determines a time and/or rate of packet transmission based on the credit value [0028-0039] of Subramanian.

**Regarding claim 18**, Attar and Subramanian teach the method according to claim 1, the method being repeated periodically [0028-0029] of Subramanian.

**Regarding claim 19**, Attar and Subramanian teach the method according to claim 1, wherein the base station transmits data to a destination user equipment in its downlink [0028-0033] of Subramanian.

**Regarding claim 20**, Attar and Subramanian teach the method according to claim 1, wherein the base station transmits data to a destination user equipment via a network [0028-0033] of Subramanian.

**Regarding claim 21**, Attar teaches a base station (Figure #1, Access Point/Base Stations #100, #102) for receiving data packets in an uplink from a source user

equipment for onward transmission to a destination user equipment (Col. 7, lines 21-65) the base station comprising: a determining unit which determines a measure of a quality of service from the base station to the destination user equipment (Col. 3, line 60 to Col. 4, line 42), and (Col. 7, lines 21-65); a producing unit which produces a credit value based on the measure of the quality of service (Col. 3, line 1 to Col. 4, line 43); a transmitting unit which transmits the credit value to the source user equipment and (Col. 13, lines 5-65); a receiving unit which receives from the source user equipment an indication of whether the base station has been selected as an active base station (Col. 3, line 60 to Col. 4, line 43); and

**But Attar does not clearly teach** an allocating unit which allocates a channel to the source user equipment if the base station has been selected as an active base station.

However, Subramanian teaches an allocating unit which allocates a channel to the source user equipment if the base station has been selected as an active base station [0028-0039].

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Attar, such that Subramanian's, in order to provide the best performance for selecting the base station such as quality of service and/or during handoff, e.g. for maximizing the effective data rate for avoiding overlapping etc.



**Regarding claim 22**, Attar and Subramanian teach the base station according to claim 21, wherein a credit value is determined for each of a plurality of source user equipments [0028-0033] of Subramanian.

**Regarding claim 23**, Attar and Subramanian teach the base station according to claim 21, wherein the credit value is based on a plurality of different measures of the quality of service from the base station to a destination user equipment [0028-0039] of Subramanian.

**Regarding claim 24**, Attar and Subramanian teach the base station according to claims 21, wherein a credit value is determined for each of a plurality of source user equipments by comparing measures of a quality of service from the base station to a plurality of destination user equipments [0028-0039] of Subramanian.

**Regarding claim 25**, Attar and Subramanian teach the base station according to any claims 21, wherein the credit value is based on a plurality of relative measures [0028-0033], and is a single value obtained by combining the relative measures [0028-0039] of Subramanian.

**Regarding claim 27**, Attar and Subramanian teach the user equipment according to claim 26, further comprising a storing unit which stores a history of credit values [0028-0033], and wherein the selecting unit is arranged to select a base station as an active base station based on the history of credit values [0028-0039] of Subramanian.

**Regarding claim 28**, Attar and Subramanian teach the user equipment according to claim 26, further comprising a determining unit which determines a

measure of radio channel conditions from the user equipment to the base station [0028-0033], and wherein the selecting unit is arranged to select a base station as an active base station based additionally on the measure of radio channel conditions [0028-0039] of Subramanian.

**Regarding claim 29**, Attar and Subramanian teach the user equipment according to claim 26, further comprising a storing unit which stores a history of radio channel conditions [0028-0033], and wherein the selecting unit is arranged to select a base station as an active base station based on the history of radio channel conditions [0028-0039] of Subramanian.

**Regarding claim 30**, Attar and Subramanian teach the user equipment according to claims 26, further comprising a transmitting unit which transmits an indication of a selected base station (Col. 3, line 60 to Col. 4, line 43) of Attar.

**Regarding claim 31**, Attar and Subramanian teach the user equipment according to claims 26, further comprising a scheduling unit which schedules uplink transmissions in dependence on the credit value [0028-0033] of Subramanian.

**Regarding claim 33**, Attar teaches a communications system comprising: a base station (Figure #1, Access Point/Base Stations #100, #102) a base station for receiving data packets in an uplink from a source user equipment for onward transmission to a destination user equipment (Col. 7, lines 21-65), the base station comprising: a determining unit which determines a measure of a quality of service from the base station to the destination user equipment (Col. 3, line 60 to Col. 4, line 42), and

(Col. 7, lines 21-65); a producing unit which produces a credit value based on the measure of the quality of service (Col. 3, line 1 to Col. 4, line 43); a transmitting unit which transmits the credit value to the source user equipment (Col. 3, line 1 to Col. 4, line 43); a receiving unit which receives from the source user equipment an indication of whether the base station has been selected as an active base station (Col. 3, line 60 to Col. 4, line 43); and

**But Attar does not clearly teach** an allocating unit which allocates a channel to the source user equipment if the base station has been selected as an active base station; and a user equipment for transmitting data to a destination user equipment via one **or** more base stations using soft handover, the user equipment comprising: a receiving unit which receives said credit value from a base station the credit value being based on a measure of a quality of service from the base station to the destination user equipment; and a selecting unit which selects a base station as an active base station based on the credit value.

However, Subramanian teaches an allocating unit which allocates a channel to the source user equipment if the base station has been selected as an active base station [0028-0033]; and a user equipment for transmitting data to a destination user equipment via one **or** more base stations using soft handover [0010-0013], the user equipment comprising: a receiving unit which receives said credit value from a base station the credit value being based on a measure of a quality of service from the base station to the destination user equipment [0028-0033]; and a selecting unit which selects a base station as an active base station based on the credit value [0028-0039].

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Attar, such that Subramanian's, in order to provide the best performance for selecting the base station such as quality of service and/or during handoff, e.g. for maximizing the effective data rate for avoiding overlapping etc.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL T. VU whose telephone number is (571)272-8131. The examiner can normally be reached on 8:00am - 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles N. Appiah can be reached on 571-272-7904. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MICHAEL T VU/  
Examiner, Art Unit 2617

/Charles N. Appiah/  
Supervisory Patent Examiner, Art Unit 2617